

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
9 September 2005 (09.09.2005)

PCT

(10) International Publication Number
WO 2005/083451 A1

(51) International Patent Classification⁷: **G01P 15/125**, (74) Agents: ROONEY, Paul Blaise et al.; BAE Systems plc, 1/00, 15/08 Group IP Department, Lancaster House, P.O. Box 87, Farnborough Aerospace Centre, Farnborough Hampshire GU14 6YU (GB).

(21) International Application Number:

PCT/GB2005/000652

(22) International Filing Date: 22 February 2005 (22.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0404368.3 27 February 2004 (27.02.2004) GB
04251138.6 27 February 2004 (27.02.2004) EP

(71) Applicant (for all designated States except US): BAE SYSTEMS PLC [GB/GB]; 6 Carlton Gardens, London, Greater London SW1Y 5AD (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MALVERN, Alan, Richard [GB/GB]; BAE Systems Avionics Limited, Clittaford Road, Southway, Plymouth Devon PL6 6DE (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

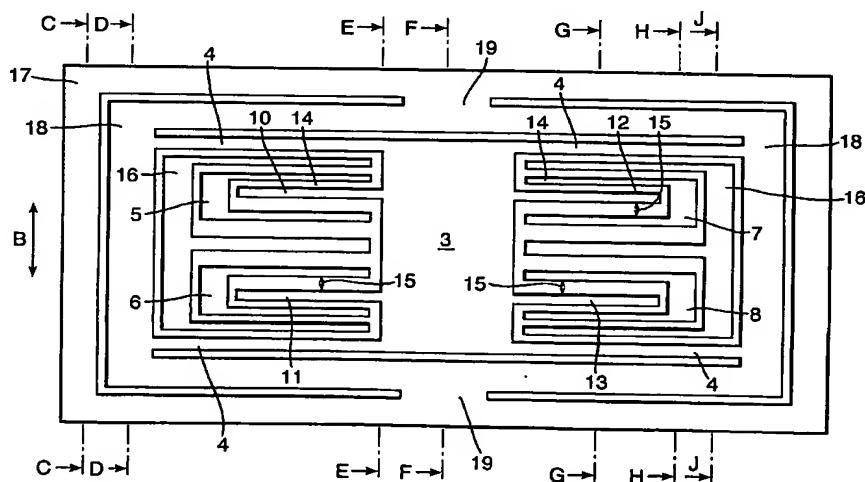
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: ACCELEROMETER



WO 2005/083451 A1

(57) Abstract: The accelerometer has a base (2), an outer planar ring-like support frame (17) fixedly bonded to the base (2), and an inner planar ring-like support frame (18) flexibly suspended within the outer frame (17) by mounts (19) connecting the inner frame (18) to the outer frame (17) so that the inner frame (18) is spaced from the base (2), co-planar with the outer support frame (17) so as to provide flexible suspension for the inner support frame (18) reducing compressive and/or tensile forces on mounting legs (4) flexibly mounting a proof mass (3) in the inner support frame (18).



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.